al Society for Thrombosis and Haemostasis (ISTH) published a score system to evaluate DIC. *Methods.* 32 patients suffering from severe sepsis and 8 patient with septic shock were evaluated following the DIC score (DICs) of the ISTH. Points were given according to thrombocytes and fibrinogen levels, prolongation of prothrombin time as well as fibrin related markers (FRM). Fibrin monomer (FM) and Ddimer (DD) had been chosen as FRM, respectively. Coagulation activation, fibrinolysis parameters as well as inflammatory mediators had been measured in these patients. Moreover, organ dysfunction scores (MODS) had been calculated. *Results.* Total DICs was calculated for each patient with both FRM, FM and DD, respectively. Using FM as well as DD as FRM, DICs for non-survivors (n=13) as well as for septic shock patients were higher ($p<0.04$) as compared to survivors and patients with severe sepsis, respectively. By the ISTH definition, patients with a DICs>=5 suffered from overt, whereas patients with a DICs <5 had non-overt DIC. By using FM as FRM, 28 patients suffered from non-overt, whereas 12 had a overt DIC. For DD, 30 had overt as compared to 10 with non-overt DIC. For both FRM, higher thrombin-antithrombin complexes and plasminogen activator inhibitor type-1 levels had been found ($p<0.005$) in patients with overt as compared to non-overt DIC, whereas no difference in plasmin- 2-antiplasmin was found. In the DICs calculated by using FM as FRM, lower levels of FVII and FV ($p<0.015$) were measured in patients with overt as compared to those with non-overt DIC, whereas no difference was found for FII and FX, respectively. Using the DICs with DD as FRM, only lower FVII levels in the overt as compared to the non-overt group was found ($p=0.009$). Patients with overt DIC had a sig. higher risk to die (Odds Ratio (OR) 5 for both scores) and to develop septic shock (OR>4). Using FM as FRM sig. worse organ function (calculated by 3 different MODS scores) was found in patients with overt as compared to non-overt DIC. *Summary/Conclusions.* The ISTH DICs using FM as well as DD as FRM increases with advanced coagulation activation and predicts fatality as well as disease severity. MODS correlates well with DICs using FM as FRM. FVII level is a sensitive marker for coagulation activation in sepsis.

0375

EPIDEMIOLOGY OF FUNGAL INFECTIONS IN HEMATOLOGICAL MALIGNANCIES IN ITALY: SEIFEM-2004 STUDY (SORVEGLIANZA EPIDEMIOLOGICA INFEZIONI FUNGINE NELLE EMOPATIE MALIGNE)

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′Background/Aims. To evaluate the incidence and the outcome of fungal infections in patients affected by haematological malignancies and admitted in Italian centres. *′Methods.* A retrospective study, conducted over 1999-2003, in patients with hematological malignancies (HM), admitted in 18 hematology divisions in tertiary cares or university hospitals, who developed fungal infections. *′Results.* Our population included 11,802 patients: 3,012 with AML (25.5%), 1,173 with ALL (9.9%), 596 with CML (5%), 1,104 with CLL (9.4%), 1,616 with MM (13.7%), 3,457 with NHL (29.3%), 844 with HL (7.2%). Patients who underwent autologous or allogenic HSCT were included in a specific different analysis. A proven or probable fungal infection occurred in 538 patients, with an incidence of 4.6%; in particular we registered 346 episodes sustained by moulds (incidence 2.9%) and 193 by yeasts (incidence 1.6%). The incidence rate depends upon underlying malignancy (12.3% in AML, 6.5% in LLA, 2.7% in CML, 0.6% in CLL, 0.5% in MM, 1.6% in NHL, 0.9% in HL). Among moulds, the detected etiological agents were Aspergillus spp (310 episodes, incidence 2.8%), Mucorales spp (14 episodes, 0.1%), Fusarium spp (15 episodes, 0.1%), and other rare fungi (7 episodes, 0.1%). Among yeasts we registered only septicemia sustained by Candida spp (175 patients, incidence 1.6%). Other yeast infections were caused by Cryptococcus spp (8 pts, incidence 0.1%), Tricosporon spp (7 pts, 0.1%) and other rare agents (2 pts). As for aspergillosis, the identification of the specific subtype of agent was possible only in the 108 cases (35%); A.fumigatus was identified in cases (15%), A. flavus in (12%), A. terreus in (5%), A.niger in (2%). It is worth noting that the number of infections caused by A.flavus increased from 1999 (5 pts, 8.8% of the total cases of aspergillosis registered during the year) to 2003 (14 pts, 18.4%); relative risk was about 2.10 (IC95% 0.8-5.49; p-value 0.117). Conversely all other subtypes showed a stable incidence. The letality rate registered in the population was about 39%, with differences between aspergillosis (42%) and candidemia (33%). In particular the letality due to aspergillosis ranged from 40% in 1999 to 45% in 2003 without significant variation (RR 1.11; IC95% 0.74-1.66; p-value 0.613), as well as the letality in patients affected by candidemia not significantly increased from 30% in 1999 to 37.5% in 2003 (RR 1.25; IC95% 0.67-2.32; p-value 0.478). *′ummary/conclusions*. Our study confirms the general trend already described for hematological patients: infections due to moulds continue to be more frequent than those caused by yeast. Among all fungi, Aspergillus spp remains the main etiologic agent. AML represents the most frequently involved cathegory. The mortality rate is actually about 40%, with a remarkable decrease when compared to past years.

0376

LOW DOSE LIPOSOMAL AMPHOTERICIN B (L-AMB) AS PROPHYLAXIS OF INVASIVE FUNGAL INFECTIONS IN PATIENTS (PTS) WITH PROLONGED NEUTROPENIA: PRELIMINARY RESULTS OF A RANDOMIZED PHASE III TRIAL

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Background. This trial was designed to compare the incidence of invasive fungal infections (IFI) in L-AmB prophylaxis to no systemic prophylaxis. *Aims.* In order to evaluate the indication for early trial stopping (significant difference in mortality) we performed a preliminary analysis. *Methods.* 140 pts with hematological malignancies (HM) and expected neutropenia (neutrophils <500/µl) >10 days (D) following intensive chemotherapy or autologous hematopoietic stem cell transplantation (HSCT) were randomized to either Arm 1) 50 mg L-AmB i.v. every second D started 1-2 D before neutropenia or Arm 2) No systemic antifungal prophylaxis. Treatment continued until neutrophil recovery, brakethrough IFI, intolerable toxicity or dead. Assuming 82 eligible pts in each arm the study had 0,80 power to detect 50% difference in the incidence of proven, probable or possible IFI (primary endpoint). All p-values reported are two-sided. *Results.* Pt Characteristics: Eligible pts Arm 1: 40; Arm 2: 45. Reasons for exclusion were: Neutropenia<10 D (50), stop of treatment due to skin rash (2), baseline infection (2) and patients decision (1). Pretreatment characteristics were equally balanced for age (mean 55.4 years), underlying disease (59 AML, 16 ALL, 10 NHL), duration of neutropenia (mean 18.4 D) and treatment(primary 61, secondary 16, transplant 8). Primary endpoint: Incidence of IFI was 2 of 40 pts (5%) in Arm 1 and 22 of 45 pts (49%) in Arm 2 ($p < 0.001$, RR = 10.0, CI 2.5-40.0). Key secondary endpoints: Fever of unknown origin (FUO) occurred in 16 pts (40%) vs. 30 pts (67%) ($p = 0.017$, RR = 1.67, CI 1.08-